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(54) Title: METHOD OF MAKING POLYMER ELECTROLYTE ELECTROCHEMICAL CELLS

(57) Abstract

The invention relates to a method for the preparation of a polymer electrolyte electrochemical cell using an electrolyte precursor, said precursor comprising one or more solvents, one or more salts and a polymer which dissolves in the solvent at a first temperature (T_{dissol}) and which is capable of forming a gel on subsequent cooling following heating to a second temperature (T_{gel}), T_{dissol} being lower than T_{gel} , which method comprises: (a) heating the electrolyte precursor to T_{dissol} ; (b) optionally cooling the electrolyte precursor; (c) incorporating the electrolyte precursor into the electrochemical cell; (d) heating the electrochemical cell to T_{gel} ; (e) cooling the polymer electrochemical cell to ambient temperature to bring about gelling of the polymer electrolyte. Preferably the polymer is a homopolymer or copolymer from the group of monomers of vinyl fluoride, vinylidene fluoride, trifluoroethylene, tetrafluoroethylene and hexafluoropropylene.